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PROPOSAL TITLE:

China's Evolving Agricultural and Trade Policies: Commodity Market Impacts

TARGET MARKET:

Describe and assess how China uses agricultural and trade policies to insulate its agricultural economy from global market fluctuations. How do China's policies affect world commodity markets? What policy approaches might China pursue in the future and what are the implications for market trends?

Proposed Dates of Implementation:

October 2008-September 2009

Project Summary:

China's agricultural and trade policies are not well understood by international counterparts, yet these policies may be among the most important factors influencing world markets for farm commodities. Most analysts expected China to import large quantities of grain after joining WTO, yet the country remained a net exporter of grain until 2007. On the other hand, its imports of soybeans, vegetable oil, and cotton far exceeded expectations. In 2007-08, China abruptly cut off its grain exports to insulate itself from the world market, further tightening world grain supplies and contributing to high world prices. Policymakers in China have placed a renewed emphasis on grain self-sufficiency and have strengthened their resolve to limit grain imports to no more than 5% of the country's grain requirements.

This project will describe and explain Chinese agricultural and trade policies, work with leading policy advisors in China to assess how these polices affect world markets, and strengthen analytical capacity in China and the United States by refining economic models of the Chinese agricultural sector and its links to world commodity markets. The USDA's Economic Research Service (ERS) and FAS-Beijing Office of Agriculture will make use of strong ties with China's State Council, Chinese Academy of Sciences and other institutions developed in past USDA-China capacity-building programs. The project will accomplish the following:

- Describe how China uses a combination of border measures and domestic subsidies and tax cuts to insulate its economy from fluctuations in world markets while meeting growth and consumer welfare objectives.
- Determine how policy variables can be incorporated in state-of-the-art partial-equilibrium models of the Chinese agricultural sector and world commodity markets being developed at ERS and at counterpart agencies in China.
- Construct policy scenarios that Chinese leaders might pursue. Assess probable impacts of these scenarios on world commodity markets using integrated results from China and ERS models.
- Publish descriptions of policies and results of assessments in a series of USDA reports and articles.

The results of this project will clarify China's new policies for market analysts and trade policy specialists. The ERS team will build on its past successful technical assistance to Chinese agencies in market information and analysis by working closely with influential Chinese policy advisors to help them assess the economic impacts of trade and agricultural policies. We will provide insights about the trade and cross-commodity impacts of policies. What are the consequences of China continuing its policy of self-sufficiency in grain? How does China's policy emphasis on grain self-sufficiency markets for other commodities like oilseeds and cotton? How would world markets and Chinese producers and consumers be affected if China lowers barriers to grain imports?

The reports and data products generated by this project will provide in-depth analysis that will aid agribusiness marketers and analysts, trade associations, USDA analysts, as well

as grain and livestock producers who want a firm grasp of the China agricultural domestic and trade policies. With its close contacts in China, broad commodity coverage, and strong track record of providing reports and briefings to a wide audience, ERS is in a unique position to provide results of this type of policy changes and their impact on U.S. and world commodity markets.

The analytical capacity gained through this project will aid ERS, WAOB, and other USDA agencies in projecting world supply and demand for livestock products, feed grains, and oilseeds. The goodwill from successful bilateral exchanges is an important intangible factor in China that will improve USDA's access to Chinese officials and improve the prospects for U.S. products vis-à-vis those of competing countries.

Background

Since joining WTO in December 2001 China has been feeling its way toward a new hybrid approach to agricultural and trade policy. It has abandoned the direct central planning and state monopolies that characterized its agriculture and foreign trade in past decades. It has adopted a more open trade regime that complies with WTO requirements, but Chinese policymakers have reserved important policy levers that are used to guide the agricultural economy.

As a WTO member China cut agricultural tariffs to one of the lowest averages (15%) of any country, eliminated most state trading monopolies, agreed to allow foreign companies to operate in China with greater freedom, set sanitary and safety standards based on science and harmonized with international standards, publish regulations and offer them for public comment. Tariff rate quotas were set to cap imports of certain sensitive commodities like rice, wheat, corn, cotton, and sugar at low tariffs of 1-to-5%.

Some recent trends in Chinese policies include the following:

- China supplements traditional trade measures—tariffs and quotas—with value added tax (VAT) waivers and rebates, *ad hoc* tariff cuts and expansion of import quotas, export taxes, and export quotas.
- Government analysts track trade, prices, and other indicators using an "early warning system" with the intent of detecting market disruptions that can be addressed using various policy measures.
- China's domestic agricultural policies—tax cuts, farm subsidies, input subsidies, price supports, financial support for agricultural initiatives—were revamped after WTO accession, in part to counter anticipated effects of imports on Chinese farmers.
- General policies are formulated at the central level but provincial and local authorities have considerable latitude to implement them. Many policies only apply to specific provinces or regions and they may be implemented differently in various localities.
- The government has been withdrawing from a direct role in grain procurement, price setting, marketing, and buffer stock-holding, but the trend has been slowed

by a minimum-price procurement policy for wheat and rice which has made the government the main purchaser of wheat. Inflationary pressures induced the government to attempt to revive food price controls in 2007.

While China's agricultural tariffs are low in comparison to those of most countries, policymakers adjust many of the policy measures described above on an *ad hoc* basis to try to stabilize markets and insulate China's market from world market fluctuations.

Problems to be Addressed

In the past several years, China's agricultural support has been increased significantly to improve farmers' income and to provide incentives for farmers to produce grain. How effective are these subsidies and do they comply with WTO regulations? Past work has focused on barriers to imports, but barriers to exports have become important as a source of volatility in international markets. A systematic and quantitative analysis can provide a clearer picture of how trade-restricting policies affect markets.

How has China insulated itself from world market fluctuations? Has its control of grain markets come at the cost of greater imports of soybeans and vegetable oils? What policy measures have been effective—how have they affected domestic and international markets? Are China's price-stabilization policies effective, or do they preserve short-term price stability at the cost of increasing long-term volatility and creating price pressures in other markets?

The lack of detailed and precise understanding of China's agricultural and trade policies makes it difficult to assess the future demand, supply, and trading opportunities of major agricultural commodities in China. While China has pursued policies to maintain short-term stability and grain self-sufficiency, the long-term effects and impacts on world markets are not well understood. Grain self-sufficiency policies can have cross-commodity impacts on related commodities like oilseeds and meats. An in-depth investigation and analysis of China's agricultural and trade policies is essential and critical for understanding the underlying reasons behind China's ability to isolate its major bulk commodities markets from market volatility. Most prominently, China prevented its grain prices from rising as fast as world grain prices during 2007-08, leaving China's grain prices well below world prices. However, China was not able to insulate its market from rising soybean and vegetable oil prices since it imports these commodities.

Project Methods

This project will bring together economists from USDA and China State Council's Development Research Center, Chinese Academy of Sciences, and other institutes to produce a thorough assessment of China's agricultural and trade policies implemented in recent years. The ERS China Team will work with collaborators from China and the USDA/FAS Beijing Office of Agriculture to assemble unpublished and Chinese-language

information and data that will present a broad picture of the related agricultural and trade policies in China in recent years. Activities include:

- A preliminary investigation of China's agricultural and trade policy conducted by our collaborator, the Center for Chinese Agricultural Policy (CCAP), Chinese Academy of Sciences, and by other research institutes, will be compiled and reviewed.
- A broader and more in-depth study of China's agricultural and trade policies will be conducted. We will review Chinese-language documents, reports, and news articles, conduct interviews with China's agricultural policy advisers under the State Council and the National Development and Reform Commission, and visit local areas to learn how policies are formulated and implemented at the local level. Emphasis will be on policy content, objectives, and implications as they were published by the government.
- Our Chinese collaborator, CCAP, maintains a model of the Chinese agricultural sector based on a model developed at ERS in the 1990s. CCAP has incorporated many refinements and extensions. This model is part of China's "early warning system" that Chinese policymakers for detecting market disruptions. We will compare the current ERS model and the CCAP model to validate the consistency or inconsistency (if any) of results and improve the models.
- Policy variables will be incorporated into an ERS partial equilibrium mathematical programming trade model to assess and evaluate quantitatively the impact of those policies on global commodity markets and on China's producers and consumer incomes.
- We will formulate alternative policy scenarios that the Chinese government might pursue to maintain grain self-sufficiency, protect farmer incomes, or maintain low prices for consumers and industrial users of commodities, and evaluate and compare the likely outcomes of such scenarios. The results will illustrate the economic impacts of market-distorting policy measures.

Various analytical results based on the above investigation will be used to improve the modeling and forecast capacity in the United States and China. The ERS China Team will take advantage of strong ties with Chinese colleagues developed since the 1990s. The project will lead to a series of monographs, information bulletins, web products, and results which will be disseminated in related seminars and workshops. New data will be incorporated into the ERS online China database.

The model used in the proposed project will be able to run alone or within the ERS Partial Equilibrium Agricultural Trade Simulation (PEATSim) framework and has attributes of the CCLS (Country Commodity Link System) China regional and PEATSim (mathematical programming) models. This model includes the advantages of a detailed regional supply and demand structure which currently exists in the CCLS China regional model. This model will also include the details of China's domestic and trade policies.

This new model will provide an improved framework for conducting current and future research projects that require both a detailed China regional structure and policies from

major trading countries. In addition, the GAMS-based trade model can be run and solved for alternative scenarios by an individual analyst, which is not easy under the current CCLS linker system.

Performance Measures

- An improved analytical framework with a detailed regional structure for China will be developed for conducting policy analysis.
- An in-depth study of China's agricultural and trade policies will be produced.
- Analyses produced leading to an improved understanding of the economic impacts of market-distorting policy measures.
- Information and data products describing the operation of policies and government expenditures on various policies will be disseminated.
- Improved contacts and collaboration with analysts in the Development Research Center (DRC) of the State Council, the Center for Chinese Agricultural Policy (CCAP), the Chinese Academy of Sciences, and other research institutes in China.

Project Activities

Activities of the proposed study will include:

- ERS visits to China to meet with Chinese research institutes and government agencies and conduct interviews with top policy advisers at the State Council.
- Chinese analyst visits to ERS in Washington DC for collaborative work, particularly related to modeling structure and development.
- USDA and Chinese government joint support for model development and analysis at research institutes in China.
- Analysis of unpublished Chinese data and policy information.
- Dissemination of English-language information and data products that describe the operation of policies and government expenditures on various policies.
- Participation in seminars/workshops in the United States and China to disseminate policy information and study results to policy advisors, market analysts as well as public audience.

Value to U.S. Agriculture

As the world's largest producer and consumer of most major commodities, a relatively small change in Chinese imports or exports can have dramatic effects on world markets. U.S. farm producers and sector analysts are hungry for information on China. The evolution of Chinese policies has potentially important impacts by opening new markets for U.S. products or causing fluctuations in prices. This study will improve USDA's capability of assessing long-term and short-run market outlook for major commodities, and help producer groups and analysts assess the prospects for exports in specific sectors.

The study will maintain strong USDA ties with key policy advisors in China and provide them with rigorous economic assessments of protectionist and isolationist trade policies and subsidies. It will improve USDA's knowledge base and provide a basis for more

effective trade negotiations by providing a clear understanding of Chinese policy measures and their effects on producers, consumers, and world markets.

Personnel and Resources

Project participants will include the ERS China team--three PhD economists with many years of experience analyzing and reporting on Chinese agricultural markets--and other ERS specialists with extensive experience in economic models of commodity markets. The principal investigator of this proposed project has almost 30 years of experience specialized in China's agriculture.

ERS has tremendous experience and strong connections with Chinese government agencies, universities, and research institutes in assisting the country to establish and enhance its agricultural information system and market analysis capacity over the last ten years. ERS will build on these strong connections to conduct the proposed collaborative analyses. The project has support from the following participants:

- Mr. Xiaoqing Xu, Development Research Center, China State Council
- National Development and Reform Commission
- Dr. Jikun Huang, Center for Chinese Agricultural Policy, China Academy of Sciences
- Prof. Funing Zhong, Nanjing Agricultural University
- FAS-Beijing Office of Agricultural Affairs
- U.S. Grains Council and American Soybean Association offices in Beijing

ERS will also draw on its connections with the Ministry of Agriculture Information Center, Chinese Academy of Agricultural Sciences, Research Center for Rural Economy, and agricultural university economists to carry out this project.

Past collaborations funded by the Emerging Markets program have provided access to information and on-the-ground experience that have made ERS one of the world's leading sources of information on agricultural economics in China. ERS is known for producing clear, insightful reports about Chinese agriculture that appeal to trade and commercial analysts, policymakers, and scholars. A few examples include:

- China's New Farm Subsidies
- China's Currency Appreciation Could Boost U.S. Agricultural Exports
- "Who Will China Feed?" *Amber Waves*, June 2008
- China's Food and Agriculture: Issues for the 21st Century.
- A Tale of Two Commodities: China's Trade in Corn and Soybeans
- Trade Effects of Commercializing Genetically Modified Soybeans in China
- China's Agricultural Imports Boomed During 2003-04
- China's Soybean Imports Expected to Grow, Despite Short-term Interruptions
- China's Wheat Economy: Current Trends and Prospects for Imports.
- Is China's Corn Market at a Turning Point?

(see http://www.ers.usda.gov/briefing/china for other ERS China reports and research).

ERS gives frequent briefings on China to diverse audiences including the USDA outlook forum, the World Agricultural Outlook Board, Congressional staff, producer groups, and academic audiences. Its findings and data on China are a resource used by analysts, researchers, agribusinesses, and policymakers worldwide.

ERS also maintains an extensive online database containing Chinese statistics on agricultural production, input use, macroeconomic data, price indexes, and industrial production (see http://www.ers.usda.gov/data/china/). The proposed project will enable ERS to maintain and expand this database.

PROPOSED TIMELINE
China Agricultural and Trade Policy Development
Economic Research Service

Dates	Activities	Resources
Nov 2008	ERS visit to China--documentation of China policy development, field visits to provincial and local government agencies implementing policies, compare model structure, parameters, use of policy instruments	Travel to China, 4 ERS personnel
Jan-March 2009	Drafting description of policies, model development, implementation of policy instruments	
March 2009	Return visit by China analysts—to visit ERS and U.S. universities, report on model development	4 China counterparts to ERS
June 2009	ERS visit to China—	4 ERS staff, U.S. Cooperators
July-Aug 2009	modeling improvement and incorporating using policy variables, including trade and subsidies, into the model	
Sept 2009	China visitors to ERS, presentation of modeling and impact analysis.	4 China counterparts to ERS
Dec 2010	Release of reports on estimated results based on different policy scenarios	

PROPOSED BUDGET (October 2008 – September 2009)
China Agricultural and Trade Policies Project
Economic Research Service

Item	Notes	Amount
Travel		
ERS	2 trips to China, 4 staff @$6,400/person each trip	$ 51,200
China	2 trips, 4 staff each @$6,400/person	51,200
ERS Salaries	$450 x 80 days	36,000
Support for collaborating institutions in China (China contributes equal amount)		
Policy study		20,000
Model development		20,000
Publication costs		5,000
Total		**$183,400**